

In the Claims:

1. (Previously presented) Grinding apparatus (1) for processing an item that includes edges, roundings, and burrs (20), including a support arrangement (4) for a number of grinding heads (6) that each includes a grinding element (2) and a grinding motor (3) driving an associated grinding element (2), wherein the support arrangement (4) includes an endless conveying means (9) for the grinding heads (6), the conveying means (9) being moved in an annular course with at least one long side perpendicular to an underlying conveyor, by at least one moving motor (5) for establishing an epicyclic movement of the grinding elements (2) across the item that includes edges, roundings, and burrs (20) during operation.
2. (Previously presented) Grinding apparatus (1) according to claim 1, characterised in that the conveying means (9) is constituted by a number of drive chains or belts which are adapted for engaging with a drive wheel (11) driven by the moving motors (5).
3. (Original) Grinding apparatus (1) according to claim 1, characterised in that it includes an apparatus frame (7) in which the support arrangement (4) is adjustable in height arranged by means of a number of displacing force providers (12).
4. (Previously presented) Grinding apparatus according to claim 1, wherein the grinding elements are connected to the grinding motors with a movable universal shaft or shaft with a ball/bowl joint, whereby items with non-uniform thickness may be ground on the top side face, since the grinding elements will follow the contour of the surface of the item.
5. (Previously presented) Grinding apparatus according to claim 1, wherein first and second rows of the grinding elements are arranged to move in directions perpendicular to the direction of motion of an object on the underlying conveyor, wherein one or more grinding elements

rotate in a different direction than one or more other grinding elements, and wherein the second row of grinding elements rotate in a direction opposite to the first row of grinding elements.

6. (New) Grinding apparatus for processing a work-piece comprising a support structure, plural grinding heads suspended from the support structure, each grinding head comprising a grinding element and a grinding motor driving an associated grinding element, an endless conveyor coupled to the support structure in a plane perpendicular to a plane of the support structure, at least one moving motor coupled to the endless conveyor for moving the endless conveyor annularly along the support structure, the plural grinding heads being coupled to the endless conveyor wherein the plural grinding heads are movable transverse of a direction of movement of the work-piece thereby moving the grinding elements epicyclically across the work-piece during grinding operation.

7. (New) The apparatus of claim 6, wherein the endless conveyor includes at least one long side perpendicular to a plane of movement to an underlying conveyor conveying the work-piece.

8. (New) The apparatus of claim 6, wherein the endless conveyor comprises one or more drivers.

9. (New) The apparatus of claim 8, wherein the one or more drivers are selected from the group consisting of one or more drive chains, drive belts, wires, wide bands, and combinations thereof.

10. (New) The apparatus of claim 8, wherein the support structure further comprises at least one drive wheel driven by the at least one moving motor, and wherein the one or more drivers engage the drive wheel.

11. (New) The apparatus of claim 6, further comprising a support frame comprising one or more displaceable force elements coupling the support frame with the support structure for vertically adjusting the support structure.
12. (New) The apparatus of claim 6, further comprising a shaft coupling the grinding element with the associated grinding motor selected from the group consisting of fixed shafts, movable universal shafts, shafts with ball/bowl joint couplings, and combinations thereof.
13. (New) The apparatus of claim 6, wherein the plural grinding elements are movable in a direction perpendicular to a direction of movement of the work-piece.
14. (New) The apparatus of claim 6, wherein one or more grinding elements rotate in a different direction than one or more other grinding elements.
15. (New) The apparatus of claim 6, wherein the plural grinding elements comprise a first row and a second row of grinding elements.
16. (New) The apparatus of claim 15, wherein the second row of grinding elements have a direction of rotation opposite to a direction of rotation of the first row of grinding elements.
17. (New) A method for processing a work-piece comprising providing a support structure, suspending plural grinding heads from the support structure, providing each grinding head with a grinding element and an associated grinding motor, driving the grinding element with the grinding motor, coupling an endless conveyor to the support structure in a plane perpendicular to a plane of the support structure, moving the endless conveyor annularly along the support structure with at least one moving motor coupled to the endless conveyor, coupling the plural grinding heads being with the endless conveyor, moving the plural grinding heads transverse of a direction of movement of the work-piece, moving the grinding elements epicyclically across the work-piece during grinding operation, and processing any shape or form of the work-piece.

18. (New) The method of claim 17, further comprising vertically adjusting the support structure on a support frame by coupling with one or more displaceable force elements.

19. (New) The method of claim 17, further comprising moving the plural grinding elements perpendicular to a direction of movement of the work-piece, and rotatably moving one or other grinding elements in a different direction than one or more other grinding elements.

20. (New) The method of claim 17, further comprising moving the plural grinding elements as a first row and a second row of grinding elements, and moving the first and the second rows in opposite directions of rotations.